

Claims

1. A wireless communications system comprising a terminal capable of communicating with a plurality of base stations using a respective plurality of simultaneous communications links, a number of the plurality of simultaneous communications links bearing content data, wherein the content data borne by each of the number of the plurality of simultaneous communications links are non-identical.
- 10 2. A system as claimed in Claim 1, wherein at least one of the plurality of base stations supports a plurality of sectors.
3. A system as claimed in Claim 2, wherein the at least one of the plurality of base stations comprises a sectored antenna.
- 15 4. A system as claimed in Claim 1, wherein the terminal comprises an antenna arrangement arranged to direct a sector or beam to one of the plurality of base stations for providing a near-isolated communications link to the one of the plurality of base stations.
- 20 5. A system as claimed in Claim 1, wherein at least two of the communications links are completely isolated from each other.
6. A system as claimed in Claim 1, further comprising a routing entity capable of dividing the content data between the number of the plurality of communications links so that a proportion of the content data is communicated over a communications link of the number of the plurality of communications links and another proportion of the data is simultaneously communicated over another communications link of the number of the plurality of communications links.
- 30 7. A system as claimed in Claim 6, wherein a source of the content data comprises the routing entity.

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8. A system as claimed in Claim 7, wherein the routing entity is arranged to control routing of virtual circuits so as to cause the proportion of the data to be communicated over the communications link of the number of the plurality of the communications links.

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9. A system as claimed in Claim 6, further comprising a controller unit, the controller unit comprising the routing entity.

10. A system as claimed in Claim 7, wherein the routing entity is arranged to edit headers of data units to contain an address corresponding to the communications link of the number of the plurality of the communications links.

15. A system as claimed in Claim 9, wherein the routing entity is arranged to edit headers of data units to contain an address corresponding to the communications link of the number of the plurality of the communications links.

20. A system as claimed in Claim 6, wherein the routing entity is arranged to edit path identifiers of data units so that the proportion of the data is communicated over the communications link of the number of the plurality of communications links.

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13. A system as claimed in Claim 1, further comprising a controller unit, the controller unit being arranged to select the number of the plurality of communications links from the plurality of communications links in response to respective signal quality criteria of the plurality of communications links.

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14. A system as claimed in Claim 13, wherein the controller is arranged to select the number of the plurality of communications links from the plurality of communications links in response to respective bandwidth availability of the plurality of communications links.

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15. A communications terminal comprising a plurality of modems coupled to an antenna arrangement, the antenna arrangement supporting a plurality of simultaneous communications links, a number of the plurality of simultaneous communications links bearing content data, wherein the content data born by each of the number of the plurality of simultaneous communications links are non-identical.

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16. A terminal as claimed in Claim 15, wherein the terminal comprises a sectored multiple beam antenna arranged to direct an antenna beam to one of the plurality of base stations for providing a near-isolated communications link
5 to the one of the plurality of base stations.

17. A method of communicating data between a plurality of base stations and a terminal, the method comprising the step of:
establishing a plurality of respective simultaneous communications links
10 between the plurality of base stations and the terminal, a number of the plurality of simultaneous communications links bearing content data, wherein the content data born by each of the number of the plurality of simultaneous communications links are non-identical.

15 18. A method as claimed in Claim 17, wherein the terminal comprises an antenna arrangement, and the method further comprises the step of:
directing a sector or a beam to one of the plurality of base stations for providing a near-isolated communications link to the one of the plurality of base stations.

20 19. A method as claimed in Claim 17, further comprising the step of:
communicating the content data via the number of the plurality of communications links, a proportion of the data being communicated over a communications link of the number of the plurality of communications links and
25 another proportion of the data being simultaneously communicated over another communications link of the number of the plurality of communications links.

20. A method as claimed in Claim 19, wherein a source of the content data
30 controls routing of virtual circuits so as to cause the proportion of the content data to be communicated over the communications link of the number of the plurality of the communications links.

21. A method as claimed in Claim 19, further comprising the step of:

editing headers of data units to contain an address corresponding to the communications link of the number of the plurality of the communications links.

22. A method as claimed in Claim 19, further comprising the step of:
 - 5 editing path identifiers of data units so that the proportion of the data is communicated over the communications link of the number of the plurality of communications links.
23. A method as claimed in Claim 17, further comprising the step of:
 - 10 selecting the number of the plurality of communications links from the plurality of communications links in response to respective signal quality criteria of the plurality of communications links.
24. A method as claimed in Claim 23, further comprising the step of:
 - 15 selecting the number of the plurality of communications links from the plurality of communications links in response to respective bandwidth availability of the plurality of communications links.
25. Computer executable software code stored on a computer readable medium, the code being for communicating data between a plurality of base stations and a terminal, the code comprising:
 - 20 code to establish a plurality of simultaneous communications links between the plurality of base stations and the terminal, a number of the plurality of simultaneous communications links bearing content data, wherein the content data born by each of the number of the plurality of simultaneous communications links is non-identical.
26. Computer executable software code as claimed in Claim 25, wherein the terminal comprises a sectored multiple beam antenna, and the code further comprises:
 - 30 code to direct a sector or a beam to one of the plurality of base stations for providing a near-isolated communications link to the one of the plurality of base stations.

27. Computer executable software code as claimed in Claim 25, further comprising:

code to communicate the content data via the number of the plurality of communications links, a proportion of the data being communicated over a communications link of the number of the plurality of communications links and another proportion of the data being simultaneously communicated over another communications link of the number of the plurality of communications links.

10 28. Computer executable software code as claimed in Claim 27, further comprising code to enable a source of the content data controls routing of virtual circuits so as to cause the proportion of the content data to be communicated over the communications link of the number of the plurality of the communications links.

15 29. Computer executable software code as claimed in Claim 27, further comprising:

code to edit headers of data units to contain an address corresponding to the communications link of the number of the plurality of the communications links.

30. Computer executable software code as claimed in Claim 27, further comprising:

code to edit path identifiers of data units so that the proportion of the data is communicated over the communications link of the number of the plurality of communications links.

31. Computer executable software code as claimed in Claim 25, further comprising:

code to select the number of the plurality of communications links from the plurality of communications links in response to respective signal quality criteria of the plurality of communications links.

32. Computer executable software code as claimed in Claim 31, further comprising:

5 code to select the number of the plurality of communications links from the plurality of communications links in response to respective bandwidth availability of the plurality of communications links.

33. A programmed computer for communicating data between at least one base station and a terminal, comprising memory having at least one region for 10 storing computer executable program code, and

a processor for executing the program code stored in memory, wherein the program code includes:

15 code to establish a plurality of simultaneous communications links between the plurality of base stations and the terminal, a number of the plurality of simultaneous communications links bearing content data, wherein the content data born by each of the number of the plurality of simultaneous communications links is non-identical.

20 34. A programmed computer as claimed in Claim 33, wherein the terminal comprises a sectored multiple beam antenna, and the program code further comprises:

25 code to direct a sector or a beam to one of the plurality of base stations for providing a near-isolated communications link to the one of the plurality of base stations.

35. A programmed computer as claimed in Claim 33, the program code further comprising:

30 code to communicate the content data via the number of the plurality of communications links, a proportion of the data being communicated over a communications link of the number of the plurality of communications links and another proportion of the data being simultaneously communicated over another communications link of the number of the plurality of communications links.

36. A programmed computer as claimed in Claim 35, the program code further comprising code to enable a source of the content data controls routing of virtual circuits so as to cause the proportion of the content data to be
5 communicated over the communications link of the number of the plurality of the communications links.

37. A programmed computer as claimed in Claim 35, the program code further comprising:
10 code to edit headers of data units to contain an address corresponding to the communications link of the number of the plurality of the communications links.

38. A programmed computer as claimed in Claim 35, the program code
15 further comprising:

code to edit path identifiers of data units so that the proportion of the data is communicated over the communications link of the number of the plurality of communications links.

20 39. A programmed computer as claimed in Claim 33, the program code further comprising:

code to select the number of the plurality of communications links from the plurality of communications links in response to respective signal quality criteria of the plurality of communications links.

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40. A programmed computer as claimed in Claim 39, the program code further comprising:

code to select the number of the plurality of communications links from the plurality of communications links in response to respective bandwidth 30 availability of the plurality of communications links.

41. A computer readable medium having computer executable software code stored thereon, the code being for communicating data between at least one base station and a terminal and comprising:

code to establish a plurality of simultaneous communications links between the plurality of base stations and the terminal, a number of the plurality of simultaneous communications links bearing content data, wherein the content data born by each of the number of the plurality of simultaneous
5 communications links is non-identical.

42. A computer readable medium as claimed in Claim 41, wherein the terminal comprises a sectored multiple beam antenna, and the program code further comprises:

10 code to direct a sector or a beam to one of the plurality of base stations for providing a near-isolated communications link to the one of the plurality of base stations.

43. A computer readable medium as claimed in Claim 41, the program code
15 further comprising:
code to communicate the content data via the number of the plurality of communications links, a proportion of the data being communicated over a communications link of the number of the plurality of communications links and another proportion of the data being simultaneously communicated over
20 another communications link of the number of the plurality of communications links.

44. A computer readable medium as claimed in Claim 43, the program code further comprising code to enable a source of the content data controls routing of virtual circuits so as to cause the proportion of the content data to be communicated over the communications link of the number of the plurality of the communications links.
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45. A computer readable medium as claimed in Claim 43, the program code
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code to edit headers of data units to contain an address corresponding to the communications link of the number of the plurality of the communications links.

46. A computer readable medium as claimed in Claim 43, the program code further comprising:

code to edit path identifiers of data units so that the proportion of the data is communicated over the communications link of the number of the plurality of
5 communications links.

47. A computer readable medium as claimed in Claim 41, the program code further comprising:

code to select the number of the plurality of communications links from
10 the plurality of communications links in response to respective signal quality criteria of the plurality of communications links.

48. A computer readable medium as claimed in Claim 47, the program code further comprising:

15 code to select the number of the plurality of communications links from the plurality of communications links in response to respective bandwidth availability of the plurality of communications links.